Math 1126
Mathematics for Elementary Teachers II
Course information is also posted on Carmen.

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Tutor Room: _____   Tutor Room: Mon. 10:30 – 11:30

Appointments with either one of us are available upon request.   Wed. 11:30 – 12:30

Texts

- *(same as Math 1125 books) Mathematics for Elementary Teachers* and *Activities Manual*, (*5th edition*) by Sybilla Beckmann. (These are unbound 3-hole punched pages, but packaged together.) ISBN-9780134423319.

- Math 1126 Student Packet – distributed in class.

- You will also need: compass, protractor, 6" ruler, and a small pair of scissors that you can bring to class on a regular basis.

Course Description and Expectations

This is the second course in a two-semester sequence. Math 1126 builds on the work done in Math 1125 with number systems, operations, number theory, expressions, and equations. We will emphasize problem-solving processes and their application to the learning of pre-algebra, geometry, counting techniques and probability. The goal of these courses is to prepare you to become teachers of elementary and middle school students. Knowing the mathematics for yourself is not the same as knowing the math for teaching. To that end, we emphasize explanations of mathematical ideas. To make this point very clear: Full credit will NOT be given for correct mathematical answers without an explanation that is clear and complete.

Attendance and participation 5 days a week is critical to your success in this class.
Each class will consist of doing an activity in a small group and discussing it with the whole class. You are expected to participate actively in all phases, so please bring the Activities Manual and relevant packet pages to every lecture and recitation. Explaining your thinking verbally in small and large groups will prepare you to explain mathematics to your students. It will also help you clarify your own ideas and/or questions so that your own understanding of mathematics is deepened.

Reading is crucial.
We do not teach using the traditional lecture format. Reading assignments are designed to provide the explanation and summary of material that are not provided in class. You are expected to complete all reading assignments. You will find the Practice Problems and their solutions particularly helpful.

Exams

This course will have TWO midterms (one hour each) and a final exam (one hour, 45 minutes). These will be weighted equally. The midterm problems will be graded based on the following Grading Rubric, while the final exam will be multiple choice. Notice that grades are given not only for correctness of your solution, but also for the quality of your explanation.

The dates of the midterm exams will be on **Thursday, October 4, 2018 and Thursday, November 8, 2018**. These exams are scheduled in the evenings from 7:40 – 8:40pm. The final exam will be on **Friday, December 7, 2018 from 2:00- 3:45pm**. If you have a conflict with any exam, be sure to alert your lecturer. *All makeups require written documentation of a university-sanctioned conflict (e.g., illness, religious holiday, another university commitment). For family emergencies, speak with your lecturer.*

Grading Rubric

Points	Description	Characteristics
10	Excellent	Correct mathematics that is carefully thought out and thoroughly explained.
8	Good	Correct mathematics with an emerging but incomplete explanation.
6	Basic	Correct mathematics but little or no explanation OR largely correct mathematics with an emerging explanation that shows understanding.
4	Emerging	Work that has some merit but also has significant shortcomings in the mathematics and/or explanation.
2	Credit for effort	Work that shows some *relevant* effort but is seriously flawed.
0	No credit	No work submitted or no relevant effort shown.

Quizzes

This course will have 7 in-class quizzes. These will be held on **Fridays**. See the calendar for specific dates. Each 20-minute quiz will cover material taken from the activities completed in lecture and recitation since the previous quiz. Quizzes will be graded according to the above 10-point rubric. The lowest quiz grade will be dropped allowing you to miss a Friday class without excuse and without penalty.

Makeup Policy: If you have an excused absence (e.g., illness with doctor's note, religious holiday, documented university conflict), a makeup quiz will be permitted. Written documentation will be required for a makeup. In case of emergency, speak to your lecturer.

Homework

There will be weekly homework assignments due on **Thursdays**. Homework assignments will work a little differently from the Math 1125 assignments. Because we want to assist you in writing a correct solution and providing an accurate and thorough explanation, we have added one round of peer review which we hope will be a valuable learning process in its own way. The full description is on a separate page. Approximately 4 problems will be assigned each week, all must be completed, and ONE of these four will be graded according to the rubric shown above.

**You may use the Internet as an additional resource, HOWEVER, any use of examples or text taken from any Internet website must be cited as with any other outside materials.

***You are encouraged to work with other students and with tutors in the Tutor Room; however, you must submit your own individual written work.

Overall Grading Scheme

Participation and attendance in Class: 5%
Homework: 20%
Quizzes: 15%
Exams (3 at 20% each):   60%

Semester Grades

These will be determined roughly according to the standard OSU scheme:

Letter Grade	%		Letter Grade	%
A	93 – 100%		C	73 – 76
A-	90 – 92		C-	70 – 72
B+	87 – 89		D+	67 – 69
B	83 – 86		D	60 – 66
B-	80 – 82		E	0 – 59
C+	77 – 79			

GEC Information

This Mathematics course can be used, depending on your degree program, to satisfy the Quantitative and Logical Skills category of the General Education Requirement (GEC). The goals and learning objectives for this category are:

Goals: Courses in quantitative and logical skills develop logical reasoning, including the ability to identify valid arguments, use mathematical models and draw conclusions based on quantitative data.

Learning objectives: Students comprehend mathematical concepts and methods adequate to construct valid arguments and understand inductive and deductive reasoning, scientific inference and general problem solving.

Disability Statement

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 098 Baker Hall, 113 W. 12th Ave; telephone 292-3307, TDD 292-0901; http://www.slds.osu.edu/.

Academic Misconduct Statement. It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee. For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/resource_csc.asp)